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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,305	09/30/2003	Herbert Vernon Bendler	AD6918USNA	4094

23906 7590 12/14/2005

E I DU PONT DE NEMOURS AND COMPANY  
LEGAL PATENT RECORDS CENTER  
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WILMINGTON, DE 19805

EXAMINER
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ROBERTSON, JEFFREY

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/674,305

**Applicant(s)**

BENDLER ET AL.

**Examiner**

Jeffrey B. Robertson

**Art Unit**

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 12 and 15-22 is/are allowed.
- 6) ☒ Claim(s) 7-11, 13, 14 and 23-27 is/are rejected.
- 7) ☒ Claim(s) 28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 7-10, 13, 14, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siol et al. (U.S. Patent No. 5,380,797).

For claims 7-10 and 23-26, Siol teaches blends of polymers used for thermoplastic molding compositions. Col. 2, lines 55-59. Siol teaches that the compositions are multiphase polymers containing toughening phases and hardness phases. Siol teaches that the toughness polymers are polyacrylate elastomers that include peroxides and organic diene coagents such as ethylene glycol dimethacrylate. Col. 5, lines 13-37. Siol discloses that the hardness polymers include polyalkylene terephthalates in col. 6, lines 46-47. Siol discloses that the polyesters include polyethylene terephthalate in col. 8, lines 49-54.

Siol does not expressly teach the amounts of the polymers required in the claims. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the amounts of polymers set forth in the present claims. The amounts of each of the polymers are result effective variables that depend on the balance of toughness and hardness desired in the composition.

For claim 7, Siol does not expressly teach the continuous/dispersed phases. However, Siol does teach multiphase compositions. It is the examiner's position that when the amounts of the polymers are within the range set forth by applicant, the continuous/dispersed phases as set forth by applicant would inherently result.

For claims 13 and 14, it is the examiner's position that the properties set forth in these claims would inherently result from the amounts and identity of the polymers as set forth above.

5. Claims 11 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siol et al. (U.S. Patent No. 5,380,797) as applied to claims 7 and 23 above, and further in view of Henning (U.S. Patent No. 3,396,152).

The limitations of claims 7 and 23 are described above. Siol fails to expressly teach the peroxides set forth in claims 11 and 27.

Henning teaches acrylic elastomers with organic peroxide curing agents. See abstract and col. 2, lines 9-17. Here Henning teaches that the peroxide is 2,5-dimethyl-2,5-di(t-butylperoxy) hexyne.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the peroxides of Henning in as the peroxides set forth in Siol. The motivation would have been that Siol teaches the genus of peroxides. One of ordinary skill in the art would have turned to Henning for species of the genus set forth in Siol.

### ***Response to Arguments***

6. Applicant's arguments filed 10/14/05 have been fully considered but they are not persuasive with regard to claims 7-11, 13, 14, and 23-27. For claim 7, applicant argues that Siol does not teach or suggest the blend. The examiner disagrees. The essence of applicant's argument appears to be that the above references do not teach or suggest cross-linking during extrusion or injection molding. However, claims 7 and 23 do not set forth this limitation. These claims require that the dispersed phase of poly(meth)acrylate is cross-linked, which Siol teaches in col. 9, lines 61-64. Therefore, applicant's arguments are not persuasive with respect to these claims.

Regarding the Aishima reference, applicant argues that this reference there is no motivation to combine this reference with the teachings of the Siol reference. This argument is moot in view of the new grounds of rejection set forth above.

***Allowable Subject Matter***

7. Claim 28 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. Claims 1-6, 12, and 15-22 are allowed.

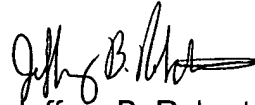
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey B. Robertson whose telephone number is (571) 272-1092. The examiner can normally be reached on Mon-Fri 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1712

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffrey B. Robertson  
Primary Examiner  
Art Unit 1712

JBR